

Project Update: February 2010

The Orangutan Information Centre's (OIC) Orangutan Conservation Village Initiative (OCVI) is a grassroots programme to promote the protection of Sumatran orang-utans (*Pongo abelii*) and their rainforest ecosystem, working with communities living adjacent to the Gunung Leuser National Park (GLNP), part of the Tropical Rainforest Heritage of Sumatra (TRHS) UNESCO World Heritage Site. The project is located in the Sulkam and Kaperas villages of the Marike region, Langkat district, North Sumatra, Indonesia.

These villages are located adjacent to the eastern block of the GLNP, which supports 1,052 Sumatran orangutans, nearly 16% of the total estimated population of 6,624 remaining in the wild (Wich *et al.*, 2008). The project was initiated in September 2009 and will run until August 2010. Various village-wide workgroups and community meetings have been held to enable communities to develop locally-led projects to support sustainable alternative livelihoods that are beneficial for both people and biodiversity. Two community groups have been established to implement conservation action plans, which have been endorsed by the village governments. Various environmental education and awareness programmes have also been conducted in these two focus villages as well as in surrounding communities. A training programme is also underway to improve the capacity and skills needed by local people to implement their selected action plans.

A series of Focus Group Discussions have enabled an assessment of village potentials and problems, and a set of action plans have been formulated and agreed upon by the communities

In both villages. These will help to sustain their livelihoods and GLNP conservation at the same time.

A. Agroforestry and integrated agriculture practices

This action plan will increase knowledge and skills in agroforestry and integrated agricultural practices in order to improve community income and also sustain and increase biodiversity levels in the region. Training is now being provided to enable the community to intensively cultivate their land based on agroforestry principles. Three rationales have been formally established for managing agricultural lands as multispecies-agroforestry systems as opposed to monocultures:

1. Crops grown in mixed-tree orchards can provide habitat for forest species;
2. Mixed orchards can act as buffer zones along forest borders as well as in corridors in which forest species can pass to connect fragmented forest zones;
3. Forest resources made available through planted trees can be harvested and provide for sustenance or saleable crops for local people and workers (Bhagwat and Willis, 2008).

The diversification of agricultural land increases its conservation value and makes land adjacent to the national park more suitable for wildlife survival (Bhagwat and Willis, 2008) whilst simultaneously benefiting the local community. Diversification ensures a more efficient land use will be adopted and therein higher yields to be harvested, which will help

ensure that encroachment into the adjacent GLNP forest does not take place for new agricultural land.

Integrated agriculture practices will also create a shift from monoculture to polyculture. As a result, the community will no longer be dependent on one commodity for their livelihoods. In addition to making the community's economy more resilient, the ecosystem also benefits as such agroforestry will promote replanting of wood trees that have both ecological as well as economical values, and host higher levels of biodiversity than do monoculture croplands (Danielsen *et al*, 2008; Fitzherbert *et al*, 2008). These agroforestry and horticultural practices will be developed based on resources available at the village level. As a practical example, an organic compost production training session has recently been conducted with utilisation of local rubbish for compost materials.

B. Community tree nursery and forestry management

This action plan promotes a sustainable ecosystem in the surrounding villages as well as GLNP forests. A community tree nursery centre will be established, to be managed by a local group. Members of this group will cultivate tree seedlings that will be needed to rehabilitate degraded areas of the GLNP, as well as to replant farmlands with trees that can help restore a balance in the natural environment and at the same time give potential for economic commodities to local farmers. The people have also determined that they will use trees produced through this action plan to rehabilitate important areas in their region such as water catchment areas and high slope areas in order to prevent land slides which have occurred in the past due to heavy deforestation.

The replanting will be done through a cultural ritual called Aron, in which tree nursery management and plantings will be done by the community as a whole. The tree nursery will produce indigenous agricultural and wood tree seedlings for replanting in the farmlands as well

as degraded areas, and farmers can buy these seedlings at a low price in order to enable the nursery to continue seedling production and provide for a community fund for future projects and also stipends for those working in the nursery or in replanting degraded communal areas.

Local communities could also sell cultivated seedlings to organisations such as the OIC and others who are active in forest regeneration in Sumatra, fostering sustainable alternative livelihoods, biodiversity conservation, and a myriad of other benefits such as increased carbon uptake which helps limit the effects of global climate change.

These action plans are still at the early stages, however we are happy to report that the communities' enthusiasm and support for the OCVI is high, and with our past experience in the field of community based conservation, we are expecting the programme to be a resounding success. There have also been discussions regarding ecotourism development in the region, which would go hand-in-hand with these sustainable alternative livelihood action plans/schemes and would serve as a wonderful model for environmentally friendly, conservation-oriented living.

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References

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Left: Action plan formulation meeting discussion in Sulkam village. Right: Compost production training session in the village of Kaperas.